

Observatory on top of Pikes Peak will enrich visitors' experience

By: Robert J. Sallee
October 9, 2017 Updated: Today at 4:06 am



Robert J. Sallee
Guest opinion

Thank you for alerting Gazette readers to Pikes Peak Observatory's request for a permit to establish a research-grade observatory on Pikes Peak.

Pikes Peak Observatory will support research and STEM education to inspire the next generation of Earth and space scientists while creating a more environmentally aware, scientifically literate public.

RTA Architects and others helped us determine that the west overlook of the new summit complex is the best site scientifically and architecturally. The 1-meter telescope requires a modest observatory dome just 18 feet in diameter.

Pikes Peak Observatory will not be the first on Pikes Peak. Samuel Langley set up an observatory in July 1878 for a total solar eclipse. This first observatory demonstrated to the world the value of high altitude observatories for celestial observation, attracting scientists to Colorado and inspiring public enthusiasm for science.

In June and July 1893, Dr. George Ellery Hale made solar observations from the summit of Pikes Peak. He noted that for solar observing, Pikes Peak seemed to offer practical advantages over other mountains of equal altitude.

The history of Pikes Peak notes that a second story and observation tower were added to the Summit House in 1951. It was described as having free parking, a glassed-in and heated observation room, open-air promenade deck, crow's nest observation lounge, large telescope, and field glasses.

In 1971, the High Altitude Observatory, National Center for Atmospheric Research operated far infrared and meteorological equipment on the summit as part of an infrared site survey.

Vanda Grubisic, director of the National Center for Atmospheric Research Earth Orbiting Laboratory, wrote: "I am expressing support for the proposed effort to create the Pikes Peak Observatory by incorporating a research grade observatory telescope equipped with atmospheric and space science instrumentation. Hereby, I would like to emphasize the high potential of the proposed Pikes Peak Summit Complex as a site for unique atmospheric measurements. The number of mountain top observatories in the world is relatively small, especially in the western United States. Yet, it is the atmospheric measurements at those unique high mountain top locations that are extremely valuable for climate and climate change research given that they provide long-term measurements in extreme alpine environments where impacts of climate change first become evident.

Furthermore, given its high elevation (14,116 feet) and relative isolation from the rest of the Colorado Rockies massif, Pikes Peak is an ideal location for measurements of long-range transport of pollutants and many other free tropospheric measurements that are typically only possible with the use of an instrumented research aircraft."

Pikes Peak Observatory will enrich the experience of Summit visitors through environmental education focused on Earth and space science relevant to Pikes Peak past, present and future. By educating students and the public through both direct and remote operation of telescopes and weather/atmospheric monitoring instrumentation, Pikes Peak Observatory will motivate students to seek additional STEM education leading to science careers and improve environmental literacy of the public on issues such as water rights and conservation, global warming, and uses of space. Pikes Peak

Observatory will contribute to a better understanding of the interactions among solar activity and changing land uses, weather patterns, pollution levels, watersheds, water quantity and quality, and climate change.

Pikes Peak Observatory looks forward to working with the U.S. Forest Service; the City of Colorado Springs; current USFS Special Use Permit holders (Pikes Peak Cog Railway, Colorado Springs Utilities, U.S. Army High Altitude Research Laboratory); native Americans and other Pikes Peak constituent groups and stakeholders, including government entities; and potential sponsors with an interest in supporting STEM education and enlightening visitors to Pikes Peak.

Robert J. Sallee is chairman of the Board of Directors for the National Space Science & Technology Institute. More information is available at pikespeakobservatory.org.